UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,246	12/29/2000	Troy A. Ussery	OFFW01-00009	8636

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EXAMINER
HO, THOMAS M

ART UNIT	PAPER NUMBER
2132	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	09/751,246	USSERY ET AL.
	Examiner	Art Unit
	Thomas M. Ho	2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 September 2006</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-32</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-32</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.
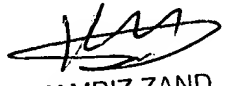
Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All · b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

KAMBIZ ZAND
PRIMARY EXAMINER
SPE 2134

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   The response of 09/25/06 has been received and entered.

2.   Claims 1-32 are pending.

Response to Arguments

In view of the Appeal Brief filed on 9/25/06, PROSECUTION IS HEREBY

REOPENED. To avoid abandonment of the application, appellant must exercise one of the

following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37

CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an

appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee

can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have

been increased since they were previously paid, then appellant must pay the difference between

the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing

below:

The Applicant has argued that the security controller seeing to divide the database on a

periodic basis has a fluid state rather than a static state in that the records of data are repeatedly

divided as portions of database 101 are stored to memory units (page 3)

That is, the memory records of the database appear to be in a state of continuous

redistribution. For example, the Applicant has pointed to redistribution of the database on "clock

pulses".

The Examiner and the Supervisory Patent Examiner has found such subject matter to be

allowable over the prior art. An additional search of the prior art has not uncovered a periodic

and continuous distribution of portions of the database over memory units where the periodic

basis for redistribution are individual clock pulses.

However, the claims as written have been rejected because the Applicant does not

explicitly recite these limitations. For example, Claim 1 recites that a security controller

repeatedly on a periodic basis divides said database into said portions, systematically

periodically redistributing database over said distributed memory units.

The Examiner contends however that all databases are divided into portions, with such

portions being periodically redistributed. It is well known to those of ordinary skill in the art that

all data within a computer system is typically stored on a hard disk drive. When the data is

accessed, it is placed into memory. Because all memory is addressable, each of these memory

locations can be considered a "distributed memory unit." Thus merely accessing the database in

accordance with the common method in the art constitutes a redistribution of portions of the

database.

In short,

- Memory is divided into individual units called addresses.

- When any information is to be used by the computer such information is accessed from

  the hard drive and placed into memory.

- Database files accessed from a hard drive stored into memory constitutes a necessary

  redistribution of the database files into these memory units.

If that is insufficient, the Examiner further contends that the Applicant's claim as written is

further met for these reasons of the art.

- Files, especially large files are not stored as any contiguous unit, but rather are

  subdivided into many smaller file clusters. Each of these may be considered

  portions of the database file.

- When data is loaded into memory, it is not stored as a contiguous block in

  memory.. Rather the data is memory is still further distributed. This too may be

  considered "redistributing the database into distributed memory units."

- For the purposes of discussion so far, the Examiner has interpreted memory as

  RAM. In fact, those of ordinary skill in the art understand that memory is a still

  broader term encompassing RAM, ROM, cache, and even virtual memory.

  When data is accessed from memory it is placed into a processor cache before

being accessed by the processor. The division of the database information from

RAM and cache constitutes yet another possible recitation over Applicant's

limitation "storing said portions to ones of said distributed memory units"

As per the Applicant's recitation of periodically redistributing said database over said distributed

memory units, the Examiner contends that the Applicant's arguments indicate that any time

period over which these fragments are periodically redistributed is acceptable. The Applicant

has argued (page 8 – page 9)

"For example, the periodic basis may be: clock pulses, a threshold number of accesses to

*database 101 or some portion thereof **for any given time period**, the time of day, time since the*

*last divide, or any other measurable event. **The periodic basis may also be at random.**"*

For this reason, the Examiner contends that any access made for the database information may be

considered "periodic" in accordance with the Applicant's interpretation of that term.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hardjono,

US patent 6363481 and Worker Exposure Surveillance System, 1997, Oak Ridge Associated

Universities(henceforward WESS)

In reference to claim 1:

Hardjono (Figures 1 & 2) discloses an apparatus for use in managing a database of selectable

records, a database administrator for association with a computer system having distributed

memory units, said administrator comprising:

- A security controller that operates repeatedly to (i) divide said database into portions and

    (ii) store ones of said portions to ones of said distributed memory units, said security

    controller thereby systematically redistributing said database over said distributed

    memory units, where the database is divided into and distributed memory units, and

    where the security controller is the secret sharing server. (Figures 1,2,3) Hardjono also

    recites that the purpose of the database distribution is to provide for the security of the

    database. (Column 1, lines 10-40)

- An access controller that operates to repeatedly establish views of ones of said selectable

    records responsive to said security controller redistributing said database over said

    distributed memory units, where the access controller is the access verification

    mechanism, where the views of the selectable records are recreated records of the

    database information. (Figure 4, Item 410, 420, 430, 435)

Hardjono fails to explicitly disclose an embodiment wherein the security controller operates to periodically distribute the database over the said units, where the units are memory units.

WESS discloses a system in which a database system is running. (page 29-32) WESS also discloses details in regards to defragmentation of the disk drive. "When fragmentation is not excessive, it presents no problem to the user. However files can become fragmented to the point where performance suffers. This can be observed in longer times being required to search data sets or collect specific records for display."

WESS discloses an embodiment wherein the controller operates to periodically re-distribute the database over the memory units of the hard drive, ie, the files of the database. "It is recommended that the database manager periodically defragment the hard drive where the WESS database resides, after backing up the data". (page 31)

It would have been obvious to one of ordinary skill in the art at the time of invention to periodically distribute the database over said memory units, in the hard drives in which the database resides in order to keep the fragmentation of the database and other files residing on the hard drive to a minimum and prevent search performance from suffering.

In reference to claim 2:

Hardjono (Figures 3,4) discloses the database administrator set forth in claim 1 wherein said access controller is further operable to access ones of said selectable records, where the interface module is operable to access the selectable records.

In reference to claim 3:

Hardjono (Figure 4) and (Column 5, lines 1-48) discloses the database administrator set forth in claim 1 initially operable to instantiate said database of selectable records through the clients.

In reference to claim 4:

Hardjono (Figures 1, 4) discloses the database administrator set forth in claim 3 wherein said initially instantiated database of selectable records is stored in a select memory unit, where each select memory unit is distributed database unit.

In reference to claim 5:

Hardjono (Figure 2) \discloses the database administrator set forth in claim 1 wherein said security controller is further operable, prior to subsequently dividing said database into portions, to combine said ones of said portions previously stored in ones of said distributed memory units in a select memory unit, where the portions of the distributed memory units may be stored on the secret sharing server.

Claims 6, 11, 15 are rejected for the same reasons as claim 1.

Claims 7, 12, 16 are rejected for the same reasons as claim 2.

Claim 8 is rejected for the same reason as claim 3.

Claims 9, 13, 17 are rejected for the same reasons as claim 4.

Claims 10, 14, 18 are rejected for the same reasons as claim 5.

5.   Claims 19-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hardjono

and Diaz et al., US patent 5689648 and Worker Exposure Surveillance System, 1997, Oak Ridge

Associated Universities(henceforward WESS)

In reference to claim 19:

Hardjono discloses an apparatus for use over a global communications network having nodes

and constituency nodes associated therewith comprising:

- a database of selectable data files associated with said company nodes, wherein said

  company nodes populate respective associated data files, where the nodes are the

  distributed databases and computer. (Figure 1) and where the network derives from a

  central office (Column 2, lines 20-45)

- a communications controller that is operable to i) propagate communication interfaces

  accessible by said constituency nodes with selected portions of said information

  under direction of said nodes, and ii) gather feedback information representative of

  constituency response to said constituency nodes accessing said communication

  interfaces, where the communications controller is the request receiver of (Figure 4),

and where the feedback of the constituency responses to the accessing through this

interface indicates an access denial or access permitted. (Figure 4)

- a database administrator for association with distributed memory units, where the

  database administrator is the verification control. (Figure 2)

- a security controller that operates repeatedly to i) divide said database into portions

  and ii) store ones of said portions to ones of said distributed memory units, said

  security controller thereby systematically redistributing said database over said

  distributed memory units, where the security controller is the secret sharing server.

  (Figure 2)

- an access controller that operates to repeatedly establish views of ones of said selectable

  records responsive to said security controller redistributing said database over said

  distributed memory units, where the access controller is the verification control that

  accesses data from the database units and where the views are the recreated blocks that

  are given to the users. (Figures 1-3)

Hardjono however, fails to disclose information that is commercial and likewise, a

communication system that acts in the context of an E-Commerce system.

Diaz et al. (Column 8, line 50 – Column 9, line 2) discloses a method and apparatus for

publication of information for CATV through a computer network through the use of databases

to store its data that it will send out to clients. Diaz et al. (Column 13, lines 13-25) also discloses

an e-commerce system that stores company data in a database and in particular provides the use

of databases in a corporate context.

Hardjono teaches that the method of his invention serves to provide for the security of a database

preventing unauthorized users from accessing data.

Hardjono fails to explicitly disclose an embodiment wherein the security controller operates to

periodically distribute the database over the said units, where the units are memory units.

WESS discloses a system in which a database system is running. (page 29-32) WESS also

discloses details in regards to defragmentation of the disk drive. "When fragmentation is not

excessive, it presents no problem to the user. However files can become fragmented to the point

where performance suffers. This can be observed in longer times being required to search data

sets or collect specific records for display."

WESS discloses an embodiment wherein the controller operates to periodically re-distribute the

database over the memory units of the hard drive, ie, the files of the database. "It is

recommended that the database manager periodically defragment the hard drive where the WESS

database resides, after backing up the data". (page 31)

It would have been obvious to one of ordinary skill in the art at the time of invention to use

Hardjono's database implementation, into the database interface system for clients used in Diaz

et al. in order to allow the clients to acquire data from the database securely and to periodically

distribute the database over said memory units, in the hard drives in which the database resides

in order to keep the fragmentation of the database and other files residing on the hard drive to a

'minimum and prevent search performance from suffering.

In reference to claim 20:

Hardjono discloses the electronic system for use over a global communications network recited

in claim 19 wherein said communications controller is further operable to process said gathered

feedback information and, in response thereto, modify one of said data lines (Figure 4)

In reference to claim 21:

Hardjono discloses the electronic system for use over a global communications network recited

in claim 19 wherein said communications controller is further operable to analyze said gathered

feedback information and ones of said data files and, in response thereto, to report results thereof

to said company node, where the gathered feedback is the response to the data access (Figure 4)

In reference to claim 22:

Hardjono discloses the electronic system for use over a global communications network recited

in claim 19 wherein said communications controller, while gathering said feedback information,

employs mathematical representations to represent at least one of constituency understanding

and constituency reaction, where the mathematical representations are inherent to all digital data

and information as binary and hexadecimal format.

In reference to claim 23:

Diaz et al. (Column 5, lines 15-50) discloses the electronic system for use over a global

communications network recited in claim 19 further comprising a security controller that is

operable, with respect to those data files associated with said company node, to limit access to

said data files to designated personnel of said company nodes, where the company nodes are the

client systems from which they can view the news, and where the access is limited subscribers

and the services that clients have subscribed to.

In reference to claim 24:

Neither Diaz et al. nor Hardjono discloses the electronic system for use over a global

communications network recited in claim 23 wherein said security controller includes an

interactive voice recognition controller that is operable to verify the identity of said designated

personnel.

Diaz et al. (Column 5, lines 25-30) however discloses that it is necessary to verifying identifying

information of a client or subscriber.

The Examiner takes official notice that an interactive voice recognition system as an

identification mechanism was well known in the art at the time of invention such as that

disclosed by US patent 6173042, and 4534056.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine

a voice recognition system in order to verify a customer because it provides the advantage of

allowing a customer verify him or herself through only speaking, and without having to enter

authentication data into a computer.

In reference to claim 25:

Diaz (Column 4, lines 55-65) discloses the electronic system for use over a global

communications network recited in claim 19 wherein said communications controller is further

operable to translate said selected portions of said commercial information from a first language

into a second language, where the commercial information, the newspaper has several versions

translated into several different languages as in common in news media distribution.

In reference to claim 26:

Hardjono (Figure 4) discloses the electronic system for use over a global communications

network recited in claim 19 wherein said communications controller is further operable to store,

index and relate associated portions of said commercial information in the data repository, where

the communications controller relates associated portions when it retrieves the shares of data.

In reference to claim 27:

Hardjono (Figures 1-4) discloses the electronic commerce system for use over a global communications network recited in claim 19 wherein said access controller is further operable to access ones of said selectable data files, where the access controller is the verification control mechanism that can access the data files of the database.

Diaz et al. (Figure 1) discloses this as well, where the selectable data files may be accessed and displayed at user displays.

In reference to claim 28:

Hardjono (Figure 3,4) discloses the electronic commerce system for use over a Global communications network recited in Claim 19 wherein said database administrator is initially operable to instantiate said database of selectable database files, where the databases are instantiated by the distributed server.

In reference to claim 29:

Hardjono (Figure 1-4) discloses the electronic commerce system for use over a global communications network recited in claim 28 wherein said initially instantiated database of selectable data files is stored in a select memory unit, where the select memory units are the memory units of the databases

In reference to claim 30:

Hardjono (Figure 2, 4) discloses the system for use over a global communications network recited in Claim 19 wherein said security controller is further operable, prior to subsequently dividing said database into portions, to combine said ones of said portions previously stored in ones of said distributed memory units in a select memory unit, where the portions of the distributed memory units may be executed and stored in a common memory area, or the storage unit (Figure 2) of the secure server.

In reference to claim 31:

Diaz et al. Figures (10B- 10J) discloses the electronic system for use over a global communications network recited in claim 19 wherein said communications controller is further operable to organize said selected portions of said commercial information that propagate said communication interfaces into channels accessible by said constituency nodes, where the channels are organized across a variety of different topics.

In reference to claim 32:

Diaz et al. Figures (10B- 10J) discloses the electronic system for use over a global communications network recited in claim 31 wherein said channels include at least two of an overview channel, an outlook channel, a community consensus channel, a community forecast channel, a research channel, an online q&a channel, an online conference channel, a financial history channel and a newsroom channel.

Conclusion

6.   Any inquiry concerning this communication from the examiner should be directed

to Thomas M Ho whose telephone number is (571)272-3835. The examiner can normally be

reached on M-F from 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Gilberto Barron can be reached on **(571)272-3799.**

The Examiner may also be reached through email through Thomas.Ho6@uspto.gov

Any inquiry of a general nature or relating to the status of this application or proceeding should

be directed to the receptionist whose telephone number is (571)272-2100.

General Information/Receptionist	Telephone: 571-272-2100	Fax: 571-273-8300
Customer Service Representative	Telephone: 571-272-2100	Fax: 571-273-8300

TMH

January 21st, 2006

KAMBIZ ZAND
PRIMARY EXAMINER
SPE 2134